4f & 5f Doc#0018

SYSTEMS
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Emissions Estimation: 13647 Rev. 2

15 MMBtu/hr Propane Burner

Emissions calculated by Vulcan® Systems for Hickman Egg Ranch are included in Table 1.These emissions have been calculated using the USA EPA method AP-42 for External Combustion Sources. Values are not a guarantee of emissions and do not reflect actual running data. Actual emissions will be affected by various factors including furnace pressures, quality of the fuel, running time of the plant, feed material properties, etc. Vulcan® and its parent company Worldwide Recycling Equipment Sales, LLC recommend consulting a certified environmental engineer when filling out any permits relating to any Vulcan® Thermal Desorption or Drying Systems.

Potential Emission Rates[1]					
NO_x[2] Tons/year[8]	CO[3] Tons/year[8]	SO_2[4] Tons/year[8]	TOCs[5] Tons/year[8]	PM[6] Tons/year[8]	CO_2[7] Tons/year[8]
2.98	1.72	0.00	0.23	0.16	2,868.85
PPM[9]	PPM[9]	PPM[9]	PPM[9, 10]	PPM[9]	PPM[9]
119.91	113.69	0.12	26.34	N/A	119,262.30
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
2.13	1.23	0.00	0.16	0.11	2,049.18

[1]Considering firing a propane burner at a maximum rate of 15 MMBtu/hr
[2]Expressed as NO_2 and calculated using an emission factor of 3.25 lb/10^3 gallon.EPA AP-42 uses an EF of 13 lb/10^3 gallon for NOx
[3]Calculated using an emission factor of 7.5 lb/10^3 gallon
[4]Considering a Sulfur content of 0.18 grains/100 ft^3 of propane vapor
[5]Total organic compounds calculated using an emission factor of 1 lb/10^3 gallon
[6]Total particulate matter calculated using an emission factor of 0.7 lb/10^3 gallon
[7]Calculated using an emission factor of 12,500 lb/10^3 gallon
[8]Year defined as operating 8 hours/day, 7 days/week, and for 50 weeks/year
[9]Calculated at 3% O_2 in dry flue gases
[10]PPM of TOCs expressed as methane